

WEST LOS ANGELES COLLEGE
PHYSICAL GEOLOGY – GEOLOGY 001

Instructor: DR. BERAKI WOLDEHAIMANOT

Spring 2015 (Feb. 9th – Jun 7th, 2015)

Phone: (310) 287-4524

Section 1176: Tu, Th 9:35 - 11:00; Bldg. MSA 307

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Section 1177: Tu, Th 11:10-12:35; Bldg. MSA 307

Office: MSB-226

Office hours: M-Th 8:30-9:30; W 15:40-17:00 & by Apmt.

COURSE SCHEDULE (Tentative)

| DATE | TOPICS | TEXTBOOK READING |
|------------------|---|--|
| FEB 9 to MAR 12 | 1. AN INTRODUCTION TO GEOLOGY {Assignment 1. Planet Earth/Universe} | Chapter 1 Pages 3-39 |
| | 2. PLATE TECTONICS | Chapter 2 Pages 41-79; Chapter 13 Pages 423-457 |
| | 3. CRUSTAL DEFORMATION & ORIGIN OF MOUNTAINS | Chapter 10 Pages 335-359; Chapter 14 Pages 459-485 |
| | 4. EARTHQUAKES & EARTH'S INTERIOR {Assignment 2. Earthquakes} | Chapter 11 Pages 361-393; Chapter 12 Pages 395-421 |
| MAR 17 | 1ST MID-TERM EXAM | |
| MAR 19 to APR 28 | 5. MINERALS | Chapter 3 Pages 81-115 |
| | 6. IGNEOUS ROCKS: Intrusive activity, volcanoes and volcanic hazards {Assignment 3. Volcanic activity} | Chapter 4 Pages 117-151; Chapter 5 Pages 153-195 |
| | 7. SEDIMENTARY ROCKS: Weathering, Mass wasting, & Sedimentation {Assignment 4. Sinkholes} | Chapter 6 Pages 197-211; Chapter 15 Pages 487-513; Chapter 7 Pages 231-267 |
| | 8. METAMORPHIC ROCKS | Chapter 8 Pages 269-301 |
| APR 30 | 2ND MID-TERM EXAM | |
| MAY 5 to MAY 28 | 9. GEOLOGIC TIME | Chapter 9 Pages 303-333 |
| | 10. RUNNING WATER & GROUND WATER | Chapter 16 Pages 515-553; Chapter 17 Pages 555-589 |
| | 11. ENERGY AND MINERAL RESOURCES | Chapter 23 Pages 779-813 |
| | 12. GLOBAL CLIMATE CHANGE AND GEOLOGY {Assign 5. Env. impact from geological resources} | Chapter 21 Pages 703-739 |
| JUN 2 @ 10:15AM | ← FINAL EXAM (SECTION 1176) | |
| JUN 4 @ 11:30AM | ← FINAL EXAM (SECTION 1177) | |

TEXTBOOK (REQUIRED)

Tarbuck, E.J., Lutgens, F.K., and Tasa, D. (2014). *Earth: An Introduction to Physical Geology* 11th edition; Pearson/Prentice Hall Publishers; ISBN: 978-0-321-81406-7

TRANSFER: CSU, UC

PREREQUISITE: None

COURSE DESCRIPTION & OBJECTIVES

Physical Geology 1 is a 3-unit course that deals with materials that compose our planet Earth and forces and processes that affect it. The course includes a survey of minerals & rocks, a study of plate tectonics, the forces & processes that create volcanoes & earthquakes, a study of surface features created by streams, groundwater & landslides; concepts behind the formation of petroleum, coal & other mineral deposit such as gold, diamond, aluminum, copper, etc.; and the environmental impact of energy and mineral resources.

STUDENT LEARNING OUTCOMES

Upon completion of this course the student will be able to:

1. Describe the origin of the planet Earth and cite evidence for its age; explain the role of plate tectonics in configuring the continents and oceans of our Planet; describe the principles of relative and absolute dating as applied to the study of Earth's history.
2. Describe processes of rock formation; identify the common minerals & rock types, and interpret the origin of rocks and their structures through observable facts.
3. Explain the global and local distribution of earthquakes and volcanoes, and examine how plate tectonics is related to earthquakes.
4. Discuss the processes of formation and distribution of energy, mineral, and water resources in global and local context.
5. Discuss the impact of mining activities, mineral refining, and burning of fossil fuels on the environment.

CLASS ATTENDANCE, IN-CLASS USE OF LAPTOPS, TABLETS (IPAD ETC.), VOICE RECORDERS & CAMERAS

It is required that students arrive in class on time. Occasional tardiness of up to 10 minutes may be tolerated. However, no student will be allowed to enter the classroom 10 minutes after the start of class.

Students who want to use laptops and tablets (such as iPad etc.) while class is in session can use them under the following conditions: (1) the laptops and tablets can only be used to read lecture notes from Etudes, or to take notes. Unless explicitly announced, no web browsing or electronic communication is allowed! (2) the student sits in the front row of seats. If the Instructor suspects that a student may be doing other activities with the computer other than those described above, the instructor reserves the right to see what the student is doing and can prohibit the student from using the computer.

Voice or video recording of lectures using a recording device may be allowed if in the instructor's judgment there is a need for a student to do so. However, students should seek prior approval from their instructor.

Taking pictures or screen shots of PowerPoint presentations or other lecture items from the white board or projector screen are NOT allowed. The reason is simple: they destruct the smooth flow of the teaching-learning process. Thus, unless explicitly approved by the instructor, students cannot use their cell phones or other devices to take pictures during lecture hours.

Students are responsible for all academic-related material, assignment, or information missed when absent. These include lectures, handouts, class activities, assignments, or any course-related information.

SUPPLEMENTAL RESOURCES ON ETUDES:

PowerPoint lecture notes, this course syllabus, announcements, and your marks for graded assessments (assignments and exams) will be posted on *Etudes*, an online course management system of the West Los Angeles College. By the first day of classes, instructions on how to log on to the Etudes website (given below) will have been emailed to all course participants who have valid student email accounts with the College.

ETUDES User ID

Your Etudes **User ID** is your Student ID Number (not your SS#).

Example: Jose Garcia has the following Student ID: 880123456

Based on this example, Jose's ETUDES **User ID** would be **880123456**

ETUDES Password (first time login)

Your Etudes password is the **MonthDay** of your birth in school records.

Example: Jose Garcia's birthday is April 11th, 1982 (04/11/82). His ETUDES Password would be 0411

When you log in for the first time Etudes will ask you to change your password.

Students can read online or print the PowerPoint lecture notes for their personal use. It must be noted that the supplemental resources are meant to enhance the course delivery system; they are by no means a replacement to attending class. Students will be required to attend classes regularly. Students should also note that all assessments will be administered on campus, not online.

ASSESSMENT AND GRADING

Assessment will include *two mid-term exams, a final exam, and 5 assignments*. Questions will be any combinations of multiple choices, matching, fill-in-the blank and essay type. Any materials covered by lectures, video shows, and as reading assignments from textbooks may be included in the exams.

All exams are closed-book and closed-note. During examinations any printed or hand-written papers, related or unrelated to the exam are NOT allowed. If any of these are found in your possession during an exam, these will be considered as cheating and will be reported to College authorities for appropriate action. In addition, during exams use of electronic media (e.g. cell phone, laptop, tablet, including listening to music from iPod etc.) will not be allowed. All electronic media should remain switched off for the entire duration of the exam. If there is a need for their use, the instructor must first approve them. Use of such media without instructor's approval, will be considered as cheating and will be reported to college authorities.

The course includes *five assignments*, each worth 10 points. Most of the assignments shall be completed in-class. Students who were absent on the day the assignment was given will score zero for that assignment and NO alternative assignments will be given.

In addition to the above, there will be *two extra credit assignments*, each worth 15 points, making a total of 30 points. The assignments will be given after the first midterm exam and your instructor will explain the task in due course.

Students must bring SCANTRON (FORM NO. 882 E), a pencil and an eraser for each exam.

Your final grade will be determined by the following:

| | |
|-----------------------------------|--------------------|
| 1 st Mid-term Exam | 100 points |
| 2 nd Mid-term Exam | 100 points |
| Final Exam | 100 points |
| 5 Assignments | 50 points |
| <u>2 Extra credit assignments</u> | <u>[30 points]</u> |

TOTAL 350 points

Final letter grades will be assigned as follows:

| |
|-----------------------------|
| A: \geq 315 points |
| B: 280-314 points |
| C: 210-279 points |
| D: 170-209 points |
| F: <170 points |

POLICY ON EXAM MAKE-UPS

Students should take exams on the scheduled dates; otherwise they will score zero points for that exam. There will be NO make-up exams except for valid and verifiable reasons (for example, if you were ill, you must submit a doctor's note). If you had an emergency on the day of the exam you, your relatives or friends must e-mail or call your instructor before the scheduled exam time. Make-up exams, when approved, will take place on a date determined by your instructor.

POLICY ON ACADEMIC HONESTY & CONDUCT IN CLASS

Pursuant to West Los Angeles College's [WLAC] policy on student conduct, all forms of disruptive behaviors such as private talking, use of cell phones and texting while class is in session, as well as going out of class to answer or make a call etc. will not be allowed. These behaviors detract from the learning experience of others in the class. Students should make certain that cell phones are turned off before entering the class. In addition, eating &/or drinking beverages (except water) in the classroom, as well as chewing gum are prohibited. These and other college policies on academic integrity (cheating, plagiarism) will be strictly enforced. Students should read WLAC's publication on all aspects of student conduct outlined in the most recent College Catalog or by logging onto the College website at http://www.wlac.edu/academics/pdf/WLAC_12-14Catalog_FRONT.pdf.

Consequences of Misconduct: Violators of College regulations and rules are subject to disciplinary action under Board Rule 9803.15 of the Los Angeles Community College District. Depending upon the seriousness of the conduct, disciplinary procedures may range from a warning to removal from the class with a referral to the Vice President of the College.

DEADLINES

Students should adhere to Add/Drop policies & deadlines of the College. It is the student's responsibility to officially drop out of the course, when he/she stops attending. Otherwise, grades other than a "W" may be assigned.

STUDENTS WITH DISABILITY

If a student has disability (with special physical, communication or learning needs) and requires accommodations, he/she should contact the Disabled Students Programs & Services (DSPS) located on the first floor of the Heldman Learning Resources Center (HLRC). DSPS' phone number is (310) 287-4450.

COLLEGE IS CLOSED ON THE FOLLOWING DAYS:

Presidents' Day: Feb 13 - Feb 16

Cesar Chavez Day: Mar 31

Spring Break: April 4 - April 10

Memorial Day: May 25

This syllabus may be modified in order to better meet student needs or in the event of an emergent matter.